

PG CBCS
M.SC. Semester-IV Examination, 2021
BOTANY
PAPER: BOT 495D
PRACTICAL
(MICROBIOLOGY)

Full Marks: 50**Time: 3 Hours****Answer any TWO questions:****25×2=50**

1. (a) Write down the principle and procedure of poly acrylamide gel electrophoresis.
(b) Write down the principle and procedure of isolation of fungi from soil. 13+12
2. (a) Write down the principle and procedure of RNA estimation from a sample.
(b) Mention the process of microbial assay of streptomycin by agar cup method. 13+12
3. (a) Write down the principle and procedure of polymerase chain reaction of a selected genomic part of a bacterium.
(b) Write down the principle and procedure of determination of minimum inhibitory concentration of streptomycin. 13+12
4. (a) Write down the principle and procedure of isolation of *Azotobacter* sp. from soil.
(b) Write down the steps for multiple sequence alignment and phylogenetic tree construction. 13+12
5. (a) Write down the principle and procedure of protein hydrolysis of a bacterium.
(b) Write down the principle and procedure for determination of amino acid pool of an organism by Thin Layer Chromatography. 13+12
6. (a) Mention the process on BLAST searching and preparation of phylogenetic tree.
(b) Mention the principle and process of IMVIC test. 13+12
